

USP30 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14725a

Specification

USP30 Antibody (N-term) - Product Information

Application IHC-P-Leica, WB,E

Primary Accession <u>Q70CQ3</u>

Other Accession <u>D3ZPG5</u>, <u>Q3UN04</u>, <u>NP 116052.2</u>

Reactivity Human, Mouse, Rat

Predicted Mouse, Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 156-185

USP30 Antibody (N-term) - Additional Information

Gene ID 84749

Other Names

Ubiquitin carboxyl-terminal hydrolase 30, Deubiquitinating enzyme 30, Ubiquitin thioesterase 30, Ubiquitin-specific-processing protease 30, Ub-specific protease 30, USP30

Target/Specificity

This USP30 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 156-185 amino acids from the N-terminal region of human USP30.

Dilution

IHC-P-Leica~~1:500

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

USP30 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

USP30 Antibody (N-term) - Protein Information

Name USP30 (<u>HGNC:20065</u>)



Function Deubiquitinating enzyme tethered to the mitochondrial outer membrane that acts as a key inhibitor of mitophagy by counteracting the action of parkin (PRKN): hydrolyzes ubiquitin attached by parkin on target proteins, such as RHOT1/MIRO1 and TOMM20, thereby blocking parkin's ability to drive mitophagy (PubMed:18287522, PubMed:24896179, PubMed:25527291, PubMed:25621951). Preferentially cleaves 'Lys-6'- and 'Lys-11'-linked polyubiquitin chains, 2 types of linkage that participate in mitophagic signaling (PubMed:25621951). Does not cleave efficiently polyubiquitin phosphorylated at 'Ser-65' (PubMed:25527291). Acts as a negative regulator of mitochondrial fusion by mediating deubiquitination of MFN1 and MFN2 (By similarity).

Cellular LocationMitochondrion outer membrane

Tissue Location

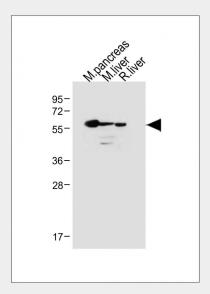
Expressed in skeletal muscle, pancreas, liver and kidney.

USP30 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

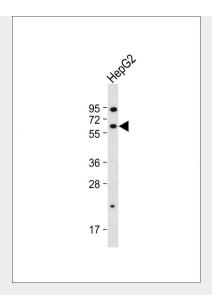
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

USP30 Antibody (N-term) - Images

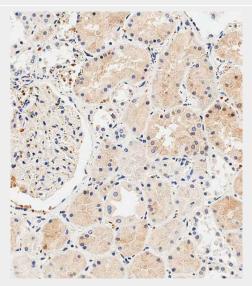


All lanes : Anti-USP30 Antibody (N-term) at 1:500 dilution Lane 1: Mouse pancreas lysate Lane 2: Mouse liver lysate Lane 3: Rat liver lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Anti-USP30 Antibody (N-term) at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded human kidney tissue using AP14725a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

USP30 Antibody (N-term) - Background

USP30, a member of the ubiquitin-specific protease family (see USP1, MIM 603478), is a novel mitochondrial deubiquitinating (DUB) enzyme (Nakamura and Hirose, 2008 [PubMed 18287522]).

USP30 Antibody (N-term) - References

Nakamura, N., et al. Mol. Biol. Cell 19(5):1903-1911(2008) Quesada, V., et al. Biochem. Biophys. Res. Commun. 314(1):54-62(2004) Puente, X.S., et al. Nat. Rev. Genet. 4(7):544-558(2003)